SECTION IV

Civil Works

The Corps of Engineers has been permanently involved in civil works construction and operations since 1824. With nationwide flood control and navigation responsibilities, its dams dot America's landscape, controlling floods, providing hydropower, supplying water, and offering recreational opportunities. Corps locks help move barges along the nation's rivers, while the Corps also ensures that American harbors are kept open for ocean and coastwise vessels. Indeed, until the Corps received the military construction mission at the beginning of World War II, the principal focus of the Corps was on civil works, although it also constructed coastal fortifications and made major contributions to enhance combat effectiveness during war.

The role of the Corps in civil works measurably increased during the New Deal of the 1930s, partly the result of the need to employ millions of people left destitute by the Great Depression and partly in response to a series of floods that wracked the Northeast and the Ohio Valley in 1936 and 1937. The Flood Control Act of 1936 declared flood control a legitimate federal responsibility and made the Corps of Engineers the nation's premier flood control agency. This one act alone authorized hundreds of levee and reservoir projects and forced the Corps to reorganize, develop new approaches, and, in general, greatly increase its construction capability. However, just as many new flood control projects were commencing, the specter of war forced the nation to switch its priorities.

As the United States became more involved in supporting the Allied war effort in 1940–41, the legislative and executive branches faced the delicate and controversial task of offsetting the cost of increased military activity by trimming domestic expenditures. Public works projects were an obvious target. They cost billions of dollars and some were marginally

justifiable. Certainly, most politicians agreed, some projects could—and must—be temporarily shelved until the return of peace. Yet, the construction of bridges, dams, airports, and highways provided employment and stimulated the economy. Any decision to halt construction of a project was bound to have political ramifications. To reduce the politics and lessen the disputes over which projects to halve or delay, the executive branch established new bureaucracies and procedures to determine domestic construction priorities. However, individual congressmen challenged the bureaucrats whenever arguable decisions adversely affected their constituents.

Although under restricted conditions, the Corps continued its civil works mission. Army engineers continued and even accelerated civil works projects vital to national defense. These included the maintenance of harbors and navigable rivers and the construction of flood control dams to protect vital industrial centers. At the direction of President Franklin D. Roosevelt, the Corps began planning postwar civil works projects over a year before World War II ended. One result was the Flood Control Act of 1944, which not only authorized a substantial number of projects, but established policies and programs that have influenced civil works activities to the present. In retrospect, then, what is surprising is not the decrease in the Corps' civil works activities during the war, but that many water projects were continued and that Congress, the Corps, and other federal agencies established an effective postwar civil works agenda.

The essays in this section describe some of the civil works activities during World War II.

The first essay gives a broad overview of the civil works program from 1939 to 1945, describing the difficulties of funding civil works projects during a period of changing priorities and increasing military expenditures.

The second essay analyzes the development of the Pick–Sloan Plan. Drafted during the war and authorized by the Flood Control Act of 1944, this plan provided the basis for the postwar development of the Missouri River basin's water resources.

Civil works projects in the St. Paul District and on the Mississippi River are described in the next two essays.

Another essay discusses the development of the Mississippi Basin Model using German prisoners of war labor. The model, designed and built by the Corps of Engineers' Waterways Experiment Station, reflected the importance of small-scale hydraulics research within civil works.

The final essay discusses the role of Portland District's Bonneville Dam in World War II. Constructed on the Columbia River, beginning in 1933 and dedicated in 1938, Bonneville provided electric power to public and private customers. During the war, it supplied power to shipyards, airplane factories, and aluminum plants scattered throughout the Northwest.

Together the essays reveal the continued large scope of civil works activities and the importance of the Corps' water resources mission to the war effort.